

ABSTRACT

A laminar sensor (1) for detecting changes on a laminar substrate (35). The sensor includes a laminar sheet (3) which has a first surface (5) and a second opposite surface (7), and is made from a conductive polymer composition which exhibits temperature dependent resistance behavior, preferably PTC behavior. A plurality of sensing elements (12) are electrically connected, preferably in series, on the sensor. Each sensing element is formed as an electrode pair containing a first electrode and a second electrode. The first and second electrodes (9,11) may be on the same surface of the laminar sheet or on opposite surfaces of the sheet. Two electrical leads (17,19) are present for connecting the sensing elements into a circuit, which may be used to detect changes in resistance which occur when a sensing element is exposed to an elevated temperature, a change in pressure, or a solvent.